MASTER OF ARTS BY RESEARCH

Mimesis and meta-narrative in contemporary Visual Music in theory and practice with special reference to ‘Dammtor’ by Diego Garro

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Award date:
2017

Awarding institution:
Coventry University

'Mimesis and meta-narrative in contemporary Visual Music in theory and practice with special reference to '*Dammtor*' by Diego Garro'

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September 2017

A thesis submitted in partial fulfilment of the University's requirements for the Degree of Master of Research

Certificate of Ethical Approval

Applicant:

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Project Title:

Exploring Mimesis in Visual Music

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

02 August 2017

Project Reference Number:

P53088

ABSTRACT

The research conducted in this thesis explores the role of mimesis in contemporary Visual Music. Specific techniques and aesthetic decisions are addressed to find out what separates a mimetic Visual Music practice from other forms of Visual Music that are based more closely on a visual equivalent of reduced listening. This research also focuses on the effect mimesis may have on the formation of a meta-narrative in Visual Music. To explore these topics, the research draws primarily on the academic and compositional output of Diego Garro, a Visual Music composer who creates what he has referred to as 'Mimetic Visual Music'. Garro's composition *Dammtor* (2013) is analysed in detail to demonstrate the compositional techniques and aesthetic decisions that are described in his writing. The work of another contemporary Visual Music composer, Joseph Hyde, provides a contrasting compositional methodology to that of Garro, one that is more firmly rooted in the ideas of *musique concrète.* In addition, Simon Emmerson's writings on mimesis and the language of electroacoustic music set a theoretical foundation to mimesis in the sonic realm, theories that can be applied to audio-visual work. Ultimately, the findings of the research culminate in original Visual Music composition that demonstrates a knowledge and integration of compositional elements discovered through the research process, forming an original narrative that interweaves the core aspects of Mimetic Visual Music into my own creative practice.

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1. INTRODUCTION

This research is written from the perspective of a composer working primarily in electroacoustic music. My interest in the combination of electroacoustic sounds and video stems from the study of various 'experimental' film scores, in particular the score to Jonathan Glazer's 2013 arthouse film *Under the Skin*. The relationship between the sound and visuals in these experimental films prompted questions about the possibilities of audio and video interacting in different ways. On discovery, Visual Music presented itself to me as a perfect vehicle for exploring these possibilities in my own composition. In addition to being an extension of my study into experimental film scoring, it also tied in intrinsically with my compositional process, in which 'visual' stimuli strongly influenced the structure and sound-worlds of my electroacoustic compositions. A sense of narrative is also inherent in my compositional process, attracting me to the electroacoustic works and Visual Music compositions that embrace the phenomena that will occupy the focus of this research: mimesis and meta-narrative.

The term 'Visual Music' was first used in 1912 by art critic Roger Fry to describe Wassily Kandinsky's abstract style of painting. Perhaps the term involved the word 'music' because of the temporal dimension that can be ascribed to the perception of Kandinsky's art, '…which the spectator journeys through as he or she scans the shapes and colours, their mutual connections and their relations with the whole' (Garro 2012:103). Other work historically deemed as Visual Music includes abstract cinema such as Oskar Fischinger's *Optical Poem* and the experimental films produced by Arnaldo Ginna and Bruno Corra, which involved the painting of abstract shapes directly on film strip.

Contemporary Visual Music, however, has more of its roots in the sonic arts than the realm of the aforementioned visual artists. Visual Music has been present in electroacoustic circles '…since the early 1980s, in which abstract or, more generally, non-narrativic visuals (computer generated, or digitally captured and then computer

manipulated) are combined with electroacoustic sounds' (Garro 2012:104). Contemporary Visual Music can be described as 'a form of art in which the combination of moving imagery and sound establishes a temporal architecture in a way similar to absolute music' (Evans 2005). In Visual Music, both visual and sonic material are subject to compositional processes such as rhythm, counterpoint and dynamics.

There are many other art forms that use both sonic and visual material in a similar way to Visual Music, for example music videos, music visualisation software and video-jockey (VJ) presentations. What separates these forms from Visual Music is a hierarchy in which the visual element in the examples above is subservient to the sonic element. This hierarchy also applies in reverse to experimental short films, that may be non-narrativic but will often hold the visuals as more important to the whole than the music. Garro quotes Steve Bird describing a form of audio-visual composition that he calls 'Electroacoustic Cinema', an extension of Visual Music based on a paradigm that outlines an ideal relationship between audio and video: 'both audio and video are of equal importance and that their relationship must always be synergetic' (Garro, 2006:12). This equality is perhaps a utopian ideal; most pieces will likely veer towards a focus on either audio or video, deliberately or not.

Between the sound-on-film techniques of Ginna and Corra, *musique concrète* film scores, and the increasingly blurred line between sound art for film or for video (d'Escrivan 2009:70), it can be problematic to define Visual Music as a genre, tradition, sub-tradition or genre, movement or neither of the above. The interpreted definition that is intended for the purposes of this essay is as a branch of the wider electroacoustic field, which takes technical, methodological and aesthetic ideas from it, and applies them to an audio-visual domain. The influence from film is important to acknowledge, as d'Escrivan states, 'Film has gradually brought into focus the practice of sound art as something distinct from music yet existing at the end of a unified continuum between abstraction

and representation'. Despite this, the firm roots in sound art and electroacoustic practice will be considered to be the core elements of the structure and aesthetic profile of Visual Music. Although the works analysed in the thesis may not exclusively identify as this definition of 'Visual Music', Visual Music is the definition the composers of the works use, therefore it is a term I have adopted for the purpose of this research and the audio-visual work I produce as a composer.

The type of visual material used in Visual Music differs amongst contemporary composers. Some composers such as Dennis Miller use purely computer generated graphics to create the visual elements of their pieces (Garro, 2012:111), although the majority of the work this research will address uses recorded camera footage and recorded audio, subject to an array of processes and manipulations similar to an electroacoustic compositional process. When composing with recorded material, sonic or visual, the cultural and anecdotal associations we have with that material are embedded within it. Despite the numerous manipulations and processes available to contemporary composers, visual material is almost inseparable from its associative 'baggage', similar to the way that Pierre Schaeffer spoke on *musique concrète* about 'the impossibility of removing sound objects from their representative value and attaining a level of articulation he saw as worth of being called 'music" (Hyde 2012:172).

According to Garro, this impossibility represents 'riveting compositional opportunities offered by materials…which possess clear *mimetic potential*, intended here as the ability to imitate nature or refer to it, more or less faithfully and literally (Emmerson 1986)' (Garro 2014a:1). Simon Emmerson describes the phenomenon in context with the sonic arts, and divides the definition into two types of mimesis. "Timbral' mimesis is a direct imitation of the timbre ('colour') of the natural sound, while 'syntactic' mimesis may imitate the relationships between natural events; for example, the rhythms of speech may be 'orchestrated' in a variety of ways' (Emmerson 1986). In sonic practice, mimesis can be

identified in ‘programme music’ such as Debussy’s orchestral depiction of the sea in *La Mer*, and later in electroacoustic works such as Trevor Wishart’s *Red Bird* (Wishart 1978) where ‘at all times the sound materials refer to images of the real world’ (Emmerson 1986). A famous example of this is in the opening few seconds, where a woman’s scream is subject to spectral transformations, shifting through a number of recognisable sounds such as a baby’s cry and birdsong.

In both electroacoustic and in Visual Music composition, the capturing of material from the real world still forms the foundation of many composers’ compositional process. As Garro puts it, ‘a complex and often painstakingly long process of evaluation, manipulation and re-contextualisation can result in audio-visual *mise-en-scènes* that, despite the recognisable causal origin of the materials, can be wonderfully ambiguous’ (Garro 2014a:1). A result of this re-contextualisation of mimetic material can result in ‘meta-narratives’, or audio-visual ‘poetry’ that acknowledges and uses the anecdotal associations attached to material, whilst also using ‘…a wealth of strategies to progressively remove materials from their causal bonding, so they can be more flexibly arranged’ in the context of a composition (Garro 2014b). In other words, a meta-narrative tells a story without narration or a need for narrative coherence, ‘audio-visual-stories about stories’ (Garro 2014b). Within the following thesis, the term ‘meta-narrative’ can be defined as the potential overall narrative consequences of the ordering and structuring of different visual and sonic material with mimetic potential, i.e material that has potential to evoke images in the mind of the audience, potentially provoking the search for narrative meaning in the material. Although the term is similar to terms such as non-linear narrative, plot and story, the difference is apparent in the type of work that is being created; meta-narrative comes about as the result of anecdotal material that is structured primarily using musical language, as opposed to the language of film, cinema or animation.

In the following chapter, three research questions will be asked, aiming to explore the ideas of mimesis and meta-narrative in theory, and to cultivate my own Visual Music practice by observing and analysing aspects of Diego Garro's work. The primary aim of undergoing the process of answering these research questions is to serve my own creative practice. As stated at the beginning of this chapter, 'visual stimuli' and a sense of narrative are strong influences on my method of sonic composition. These aspects of my compositional practice have been the main driving factors towards the undergoing of this research into Visual Music, and additionally, they justify the specific focus on mimesis and meta-narrative throughout the thesis.

2. RESEARCH QUESTIONS

With a brief contextual overview of Visual Music, mimesis and meta-narrative, the research aims of this thesis will now be established. The research questions asked may not necessarily yield tangible answers but the exploration of the following areas will shape a narrative that focuses on the specific style of Visual Music composition that this research is interested in examining, informing my own artistic practice as a composer. Diego Garro's piece *Dammtor* (2013) will be analysed to explore the research questions, backed up by evidence found through a cross-comparison of different compositional approaches outlined in various academic texts.

Firstly, this research will ask: How is mimesis achieved and utilised in Visual Music? To answer this question, the idea of 'mimetic potential' will be explored, looking at sonic and visual material that is inherently mimetic and also material that is inherently resistant to recognisability. In addition, the treatment of visual material will be analysed, looking at the ways the material has been distanced from its causal and narrative baggage to function as 'musical' material. Through the process of examining specific uses of material in *Dammtor* and analysing the effects of the manipulations applied to it, a taxonomy of compositional strategies for using and harnessing mimesis will be identified, which can then be applied to the treatment of material in my own Visual Music composition and creative practice.

Following this, the research asks a second question: How is meta-narrative formed in Visual Music, in particular in *Dammtor*? This will be answered by attempting to uncover the relationship between mimetic sonic and visual material and its context with other material used in the composition, as well as the relationship between the material and the overall narrative structure or meta-narrative. This will also examine a number of strategies for linking sound and visuals, and which of these contribute to forming a meta-narrative.

Using the knowledge gained from the analysis of the relationships and audio-visual strategies used in *Dammtor*, I aim to develop a similar control over the meta-narrative in my own composition, through a considered structuring of sonic and visual materials.

Reflecting on the findings of the questions above prompts a third question: How does the focus on mimesis and meta-narrative in a Visual Music practice effect the overall aesthetic profile of the piece in context within the wider repertoire of Visual Music? This will be explored initially through the exposure to the differences between methodologies and Visual Music practices outlined in the initial literature review, in particularly focusing on the differences between the processes of Diego Garro and Joseph Hyde. Ultimately, this question will be answered through a qualitative evaluation of my own Visual Music composition, evaluating whether it shows examples of mimesis and meta-narrative, as well as identifying methodological and compositional similarities between the piece and the theoretical foundations discovered through the review of the literature, and the analysis of *Dammtor.*

3. LITERATURE REVIEW

To begin to contextualise and explore these questions, I will review the key texts drawn upon in this research. The specific term ‘Mimetic Visual Music’ is coined in Diego Garro’s paper ‘From ‘concert’ to ‘screening’: visual anecdotes in Electroacoustic Music presentations’ (Garro 2014a). The paper explores the idea that the audio and visual materials that composers use when creating video work possess clear ‘mimetic potential’, despite the predominance of ‘abstract’ video work from composers of electroacoustic backgrounds. With this idea, Garro defines Mimetic Visual Music as an artistic practice of audio-visual design that encourages a reconstructive process in the mind of the audience, in which a mental image is formed from a complex web of personal and cultural references taken from the sonic and visual material. This definition encapsulates what I will aim to explore in this research, looking at the specific techniques and treatment of material that allows ‘mimetic discourse’ to occur with both sonic and aural material present. Concerning the exploration of these ideas, Garro writes that the ‘…analysis of Mimetic Visual Music must inevitably be drawn from sources beyond the Schefferian methodologies and can easily cross-fade into film theory’. Garro continues to emphasise this broadening of methodological approach, arguing that ‘an audio-visual language disenthralled from the gravitational pull of narrativity, inevitably flirts with poetry and with its shifts from the tale, to more obscure meta-narratives’. In contrast with the focus on the *musique concrète* methodologies that Joseph Hyde employs, which will be explored later in this chapter, Garro focuses his paper on repertoire that apply an interdisciplinary approach to Visual Music composition, asking ‘…whether a hybridisation between sonic and visual idioms is possible.’ A significant issue that arises with this hybridisation is that of ‘narrative pull’. Garro points out that ‘the use of recognisable sound and, especially, images captured from reality, through camera filming and microphone recording, inevitably shifts the artefact

towards much more powerful and ubiquitous media, such as cinematography, drama, documentary and videogames', and that the abundance of this media makes it harder for recognisable sounds and images to resist the narrative and associative attraction to these medias when used in the context of Visual Music. The bulk of the paper focuses on specific compositional techniques applicable to video, explaining their uses as tools to resist the pull and alter the function of 'cinematographic narrativity'. The specific techniques, including slow motion, enhanced pictorial quality and granulation will be explored further in this thesis.

An earlier written article from Garro titled 'From Sonic Art to Visual Music: Divergences, convergences, intersections' (Garro 2012) offers a contextual introduction to Visual Music, and offers his own definition of the genre. As covered in the introduction to this thesis, Garro explains Visual Music's contemporary roots in electroacoustic music and posits that Visual Music has arguably become an 'intrinsic modus vivendi' of electroacoustic music. A number of important issues and concepts are highlighted that are important to forming an effective audio-visual language. He discusses the power of culturally acquired synchresis, which is 'the tendency to ascribe special correlations to sounds and visuals purely on the basis of their simultaneity'. The gestural strength of synchresis is contextualised in a 'continuum of gestural vs. visual association strategies' (see Figure i) in which Garro explores the gestural strength of material relationships, from 'separation' where the materials are lacking in relation to each other, to 'parametric mapping' where a number of specific attributes in both audio and video are synchronised. Garro continues beyond the idea of gesture and looks into 'discursive associations', taking into account the context of the material within the work. 'Contextual strategies' rely on the '…viewer's reading of the concurrent stimuli' of a piece, with little contrapuntal discourse between the streams of video and audio, a freer approach that could function effectively with an established meta-narrative. 'Allegorical strategies' involve

the use of similar manipulations on both the aural and visual streams, so that they '…may be seen as metaphors of one another on the basis of general descriptive categories, even when occurring at different times within the work.' Coalescing strategies apply a higher degree of synchronisation to this idea, seeking to incorporate the audio and visual into '…a recognisable pattern of phenomenological behaviours'. These three strategies, along with that of synchresis offer a number of ways to approach a Visual Music compositional process.

The final paper I will mention written by Diego Garro, 'On the Brink of (In)visibility – Granulation techniques in Visual Music' (Garro 2014b), offers useful insights into the compositional process of *Dammtor*, including detail on the visual granulation techniques that are used frequently in the composition. In terms of the techniques themselves, Garro identifies two main types of visual granulation: frame-based and particle-based granulation, both involving the concept of a 'visual grain'. Garro explains that 'Unlike their sonic cousins, visual grains possess both a temporal size, i.e. duration, and a geometrical (spatial) size, which refers to the area of the video frame occupied by the visible subject of the grain itself.' Frame-based visual granulation usually consists of short snippets of video, occupying most or all of the frame which make up the visual 'grains'. 'The synthesis of novel visual material occurs as a result of temporally pointillistic, full-frame images, which can retain a strong bond with aspects of the visible, real-world subjects or landscape from where the original footage is taken', suitable for creating mimetic discourse. Particle-based visual granulation uses visual grains that can be radically diverse in geometrical size and temporality which is '…likely to generate abstract visual material, as the recognisability of the subject is likely to become impaired by the geometrical and temporal segmentation of the images involved.' Both these visual granulation techniques offer ways to create relatively abstract audio-visual elements and sequences, yet preserve the mimetic potential of the object. Garro explains this effect in

sonic terms, writing that '…granulation can be used to shift the impact of mimetic material away from their intrinsic anecdotal force field, taking advantage of the great flexibility offered by such a technique, if one considers the various parameters available to sound designers: grain duration, grain density, spatial scattering, pitch range, envelope shape, etc.' Despite its focus on granulation, the paper also touches on the process behind *Dammtor*, and the compositional framework Garro used to create it. Garro comments that he found himself '…embracing verisimilitude, rather than striving to move away from it', and that '…an unmitigated departure from narrativity is not only very difficult, but also not entirely desirable'. This treatment of material is important to the formation of meta-narrative in *Dammtor* as we are left as an audience '…to recognise sounds and images together with their causal relation to reality and the stories therein; yet the "reality" they mimic is not phono/videographical, because it is re-contextualised, fragmented and re-composed in the fashion of the verses in a poem'.

Joseph Hyde's paper '*Musique Concrète* Thinking in Visual Music Practice' (Hyde 2012) presents an approach to Visual Music that uses principles taken from musique concrète and applies them in an audio-visual domain. This paper is significant to the research at hand as it provides a contrasting compositional practice to Garro's 'mimetic Visual Music' approach. Hyde first identifies two different but often intersecting areas of contemporary audio-visual practice: material transference and compositional thinking. Material transference concerns the idea of 'mapping' and looking at synaesthetic relationships, '…where equivalence is sought between the frequency domain in sound and light (colour).' The second area, 'compositional thinking', is the focus of the article and the most relevant to effectively analysing Visual Music. Hyde describes the 'compositional thinking' involved as '…the application of more abstract ideas and principles derived from music to ocular media', discussing in particular the ideas of form and counterpoint. These ideas are discussed in relation to Hyde's own compositional practice, for example his use

of counterpoint and its contrast with the fixed audio-visual synchronic relationships of an *objet audiovisuel*, proposed by Diego Garro as an audio-visual equivalent of Schaeffer's *objets sonores* (Garro 2005). Hyde provides an insight into his practice: Video clips, conceptualised as discrete entities are subjected to '…a wide variety of processes and treatments which put at the centre of the compositional structure the development and transformation of material rather than the original material itself'. Similar to acousmatic composition that employs similar processes upon sound, the concept of reduced listening has a lot of creative potential within the realm of audio-visual composition. Quoting Michel Chion, reduced listening '…focuses on the traits of the sound itself, independent of its cause and of its meaning.' (Chion 1994:29) Hyde, however regards reduced listening as 'an impossibility, albeit a very interesting and worthwhile one with to engage', and mentions the implied criticism of Lévi-Strauss' thoughts on the matter, that sounds captured from the world cannot be entirely divorced from the perceived knowledge of their origins without entirely losing meaning (Lévi-Strauss 1964). Hyde goes on to observe that '…when presented by unfamiliar and abstract sounds, the listener will tend to imagine a source of origin even if such a source is not apparent.' Whilst this observation might have indicated failure to Schaeffer in respect to his *musique concrète*, it opens interesting, potentially disruptive possibilities for composing with both audio and image. In attempting to define a visual concept similar to reduced listening, Hyde discusses his idea of 'visual suspension', offering a way to try and divorce visual material from its causal origin, and to resist the pull of narrativity often attached to it. The two main audio-visual phenomena that Hyde focuses on in his paper, that achieve visual suspension, are those of silence and noise, both in an aural and in a visual sense of the words. Hyde explores these as he believes they 'both have a phenomenological typology[1] which is relatively free of

[1] Hyde's use of the term 'phenomenological typology' refers to the classification of the phenomena of silence and noise as material that resist the referential, associative and mimetic attributes that other visual and sonic material found in the environment often have.

association, both with the environment around us and within the rarefied world of (traditional instrumental) music'. Hyde's observations of how an audience may associate sound with imagined sources, as well as the phenomena that resist this association could open up possibilities on creating tension and release through the mimetic strength, or 'recognisability' of the material.

A key text that explores mimesis in a sonic context, placing mimesis within the a wider study of 'musical discourse' is the chapter 'The Relation of Language to Materials' in Simon Emmerson's *The Language of Electroacoustic Music* (Emmerson 1986). He notes that the use of natural sound in electroacoustic composition allows for '…an acoustic palette as wide as that of the environment itself', therefore increasing the likelihood that the sounds may appear imitative'. Considering the imitative possibilities of music that uses images as well as sound as compositional material, Emmerson's explorations of these concepts are crucial to creating an audio-visual analogue to his theories on mimesis concerning sound. Emmerson notes that the evocative properties of natural sound in an artistic context are enhanced by the fact that it has been removed from its original context. Furthermore, the absence of the visual clues that accompany the sound allow and challenge the listener to re-create an imagined source or associated image. This challenges, but also opens up avenues of creative potential for Visual Music, as these visual clues can now be added to the composition itself, and perhaps, the same effect can work in reverse, removing sonic clues from visual material to conjure aural associations in the audience. Emmerson discusses a certain duality of an audience's experience of electroacoustic composition: 'The listener is confronted with two conflicting arguments: the more abstract musical discourse (intended by the composer) of interacting sounds and their patterns, and the almost cinematic stream of images of real objects being hit, scraped or otherwise set in motion.' He defines these separate arguments as 'aural discourse' and 'mimetic discourse' respectively, a combination of which can form an overall 'musical

discourse'. Emmerson continues to analyse these possible approaches by looking specifically at the terms 'abstract' and 'abstracted' syntax. The compositions of Boulez and Stockhausen are used to give contextual examples of the opposing terms. Boulez, seeing serial organisation 'as pertaining directly to, because derived from, the parameters of a purely aural ('abstract musical') discourse', acts as an example of abstract syntax, whilst Stockhausen could be seen to be using more of an abstracted syntax by applying abstract (not necessarily inherently musical) ideas to the formal levels of a work, allowing mimetic discourse to (re)appear, for example the cultural associations of the folk or anthem materials in Telemusik and Hymnen. With these observations Emmerson constructs a 'language grid' of musical discourse (see Figure ii), with an x-axis determining the degree to which a piece uses mimetic discourse over aural discourse, and a y-axis showing the degree to which a piece uses abstract over abstracted discourse. This grid is used by Emmerson to categorise works in a series of case studies, based on whether their discourse is primarily mimetic, aural or a combination of the two, and also whether the syntax is abstract, abstracted or combined.

The literature reviewed above demonstrates a foundation of knowledge surrounding Visual Music, covering its roots in electroacoustic music, such as the potential to treat both sonic and visual material in a *musique concrète* manner, numerous discursive audio-visual strategies that explore the relationship between sound and visuals within Visual Music, and Garro's introduction and brief overview of 'Mimetic Visual Music'. Emmerson's ideas of abstract and abstracted syntax, mimetic and abstract discourse and their relation to the sonic domain, points towards a gap in existing knowledge that Garro's 'Mimetic Visual Music' ideas hint at, one in which the theoretical foundation of knowledge synthesised from existing Visual Music research and Emmerson's writings on mimesis, form an original Visual Music practice that focuses on mimesis and discursive audio-visual strategies in the service of interesting relationships and possible meta-narratives.

4. METHODOLOGY

Due to the multidisciplinary nature of Visual Music using both aural and visual material, both compositional and film-theory-based research methodologies could potentially be employed in this research. In order to discuss and analyse Visual Music in a balanced and holistic way, both research areas must be considered. Existing Visual Music analysis tends to stem from electroacoustic analysis, Schefferian methodologies and spectral theory, due to the fact the majority of Visual Music composers come from a sonic background. The application of elements of spectral theory and compositional decisions rooted in sonic arts often separate Visual Music from what would simply be a short film set to music. Analysing mimetic Visual Music practices will undoubtedly take elements of film-theory such as narrative (despite the tendency to use non-narrative visuals) and mise-en-scène into account.

The existing Visual Music research that will be focused upon are the writings of Diego Garro and Joseph Hyde. These composers have been chosen as examples because the they approach the field in distinct ways; Hyde's compositional practice is firmly rooted in *musique concrète* methodologies, where a 'deliberately focused and limited pool of material is subjected to a wide variety of processes and treatments which put at the centre of the compositional structure the development and transformation of the material itself' (Hyde 2012:172). Garro however, discusses more of an interdisciplinary[2] approach to creating Visual Music, stating that 'reduced listening…and visual suspension…are important methodologies when coding and decoding the message in much Visual Music,

[2] It is important to distinguish Garro's interdisciplinary approach from the idea of Visual Music as a discipline itself. Garro's discussed approach can be seen as interdisciplinary through the integration and consideration of elements of film theory into his Mimetic Visual Music practice. Despite this, the core 'Schefferian methodologies' (Garro, 2014a:1) that define the electroacoustic discipline also define Garro's Visual Music practice. Hyde's practice, however, focuses predominantly on the Schefferian methodologies (Hyde, 2012:172), is less concerned with the materials' 'cinematic' language or mimetic discourse and therefore could be seen to be a self-contained discipline.

but for the subset of repertoire presented in this paper a ‘genetic’, i.e. related to the genesis of the work (Zattra, 2005:5), interdisciplinary approach, from a composer’s perspective, is more suited’ (Garro 2014a:2). Importantly, Garro’s approach also embraces the inevitability of mimetic discourse occurring when using material captured from the real world, and uses it within his compositional methodologies.

The addition of Simon Emmerson’s observations in ‘The relationship to language and materials’ (Emmerson 1986) provide important links between the use of mimesis and the musical language employed in a composition, discussing how the ‘imagery evoked [by music] interacts with more abstract aspects of musical composition’. Emmerson arrives at a set of distinctions in musical language, between aural and mimetic discourse, and between the use of abstract versus abstracted syntax. Focusing on work that uses recorded sounds as material, Emmerson notes that ‘we can see a continuum of possibilities between two poles. At one extreme, the mimetic discourse is evidently the dominant aspect of our perception of the work; at the other, our perception remains relatively free of any directly evoked image.’ Another continuum created by Emmerson is based on the ideas of syntax, concerning the arrangement of material to form a musical language. Syntax can either be abstracted from the materials, similar to Hyde’s *musique concrète* approach, or the syntax can be constructed independently from the materials in an abstract way, perhaps more in line with an approach that focuses on mimetic discourse in the context of a meta-narrative.

These differing theories on Visual Music praxis, mimesis and musical language begin to form a discourse that will shape the methodological approach I will take to my own research into Visual Music. Qualitative research synthesis is an approach described by Savin-Baden and Major ‘that uses qualitative methods to analyse, synthesise and interpret the results from qualitative studies’ (Savin-Baden, Major 2010). This provides a systematic framework to my research, combining the writings of Garro, Hyde and

Emmerson and using aspects of their theory and methodologies to inform my own theoretical understanding and ultimately, my compositional practice. Savin-Baden and Major provide a series of steps that outline the process of qualitative research synthesis, that I am able to apply to my research topic. Studies relating to the research question are identified, and for my research question the aforementioned studies of Emmerson, Hyde and Garro are examples of this. Qualitative studies including these and other related sources are collated in the literature reviewing stage. This creates a large body of knowledge of Visual Music, mimesis and meta-narrative that should reveal similarities and contradictions between the different methodologies, theories and points made in each of the sources. These findings would then be synthesised and interpreted from my perspective as a researcher, forming a new combined knowledge and presenting answers to my own research question.

The analysis conducted of the Visual Music work *Dammtor* (Garro 2013) will demonstrate these findings, applying the theories and findings gathered in the process of qualitative research synthesis. The analysis will explore important differences in the treatment of material compared to other forms of Visual Music, consideration of the mimetic potential of material and ways that manipulations can alter this and the consequent effect on a possible meta-narrative present in the piece. Although focusing on *Dammtor*, *Vanishing Point* (Hyde 2010) by Joseph Hyde will also be cited to provide a source of argument against Garro's methodologies as it approaches the genre in a different way. Through a process of discursive grounded theory[3], I will generate my own theories based on a culmination of my analysis of the works and the body of knowledge synthesised from the existing studies. The accumulated knowledge gained from these

[3] The use of the term 'discursive grounded theory' refers to the analysis of aspects of discourse when observing phenomena, interpreted from Savin-Baden & Major's writings (Savin-Baden, Major 2013). In context with my thesis, this refers to the generation of theory (and composition) when comparing various and differing examples of discourse in Visual Music works and writings, including the 'abstract and mimetic' discourse of musical language, and the theoretical discourse of Visual Music composers.

processes will be directed towards my own practice through arts-informed inquiry, in the form of a piece of original Visual Music. The process of creating this work will be documented, describing the choices I make in terms of the sourcing of sonic and visual material, the treatment and manipulation of that material, whether the material is used to form an abstract syntax or one abstracted from the materials, the intended type of discourse I hope to achieve and the meta-narratives that are formed.

As a researcher and active practitioner of audio-visual composition, I will be forming my own narrative and establishing a stance and original approach to creating and understanding Visual Music. The area is relatively young, with new theories and practices constantly evolving. Therefore, acknowledging the subjectivity of my research area is crucial in order to produce meaningful work; the theories and findings that this research eventually yields cannot be assumed to be true in an objective sense, and I cannot expect all members of the Visual Music community to agree with any conclusions I will draw about mimesis in Visual Music. This stresses the importance of interweaving my ontological and epistemological views on music into the synthesis of the secondary data that will be gathered from Garro, Hyde and Emmerson. To aid the progress of Visual Music as a compositional movement requires a certain flexibility in the interpretation of ideas, especially with the vast array of tools and disciplines available to a composer working with both sound and visuals. This does not mean of course, to disregard the roots of Visual Music in sonic theory such as *musique concrète* and reduced listening, some of the methodologies that have shaped present day Visual Music work. A balance must be found between my instinctive compositional practice and the culmination of knowledge taken from analysing other Visual Music works, to produce work that is both an expression of myself as a composer and a demonstration of my research into Visual Music.

Different strategies for ensuring rigour and validity are required for each stage of the methodological process. Rigour and validity can be ensured in the qualitative research

synthesis approach through the literature reviewing stage; the texts will need to be analysed carefully and thoroughly to make sure I have an accurate understanding of the points being made in each paper, before beginning the process of synthesis. This brings about certain ethical concerns, in terms of my interpretation of what the writers of those papers are trying to say. There is a degree of flexibility to understanding some of the more conceptual theories present in Visual Music research, however, I will need to take care in avoiding the misrepresentation of their views and findings, or passing them off as my own. These concerns have been partially negotiated through an email dialogue with Diego Garro (Wood 2017), using his experience in the field as a way of ensuring the validity of my own research. The conversation with Garro has also led to new insights on the process of composing mimetic Visual Music that were not initially present in the texts examined, informing my research and pushing it further. Validity in my practice as research should come as a byproduct of the rigorous undertaking of the preceding steps, as long as the findings of my research are demonstrated clearly in my composition, or if certain findings are not represented in my work it should be clearly documented in the accompanying narrative.

My choice of methodology for exploring mimesis and meta-narrative in Visual Music will provide valuable insights for me as a composer working with sound and video. Immersing myself in the existing literature will help me to improve and establish my own practice in the context of contemporary Visual Music composers. The process of analysing other pieces will reveal techniques and uses of musical language that I can borrow and use in my own composition. In creating original composition, I will be creating my own contribution to the field and hopefully gaining recognition as a member of the community of composers working in Visual Music.

There are some limitations and possible downfalls to my chosen methodologies. Despite my efforts to identify a wide range of appropriate literature, my research deals with

a specific definition of visual music, one concerned with mimesis and meta-narrative, which renders some of the surrounding literature somewhat irrelevant. This narrows the scope of my research, which could limit its success. In particular, my knowledge and understanding of texts on film-theory is not as broad as that of sonic theory, which may restrict the exploration of potential interdisciplinary approaches to Visual Music. This also applies to my practice as research - my skill and experience working with video does not compare with the experience I have composing music. Additionally, adopting a personal stance on the way that Visual Music should be composed may lead to bias when interpreting and commenting on the writings and compositional work of other composers such as Hyde and Garro, something that I hope a rigorous and broad understanding of the literature will help to avoid.

5. ANALYSIS

5.1. *Dammtor*

The following sub-chapters will make up the core analysis of the thesis. *Dammtor* (2013) is an eighteen and a half minute long audio-visual composition by Diego Garro. Garro's programme notes in the description of the Vimeo (Garro 2013) source of *Dammtor* describe the piece as 'a Visual Music work based on the poem of the same title by James Sheard (Sheard 2010), which tells a vivid tale of memories, longing and desolation in the old travel hub in the Rotherbaum quarter of the city of Hamburg' (Garro, 2013). The work is multi-mediatic, using electroacoustic sounds and various camera-sourced footage. Garro uses an important third element that drives the piece, in the form of spoken word performances of extracts from the James Sheard poem. He touches on this in his notes: 'The reciting voices trigger visual and sonic reflections on the otherwise unadorned snapshots evoked by the poem. Hence the verses, the sonic anecdotes and the imagery all become entangled in a web of reciprocal allusions' (Garro, 2013).

The ever-present subtext of this 'tale', through the mimetic sonic and visual material and the presence of the poem itself establishes a meta-narrative, an audio-visual story about a story (Garro 2014b), strung together through the relationships between the material used, their context within the piece and the anecdotal references the mimetic material makes. When asked about the conception of the piece in my email conversation with Garro, he commented that 'the structuring process, though, was independently derived from the audio and video material themselves, rather than the poem' (Wood 2017). The poem is used as a stimulus, but does not dictate the narrative structure, instead the meta-narrative is formed from the re-contextualisation of visual material that has been somewhat removed from its causal bonding, the material 'recomposed in the

fashion of the verses in a poem' (Garro 2014b), essentially audio-visual poetry based on Sheard's *Dammtor*.

The visual material used is often intended to be recognisable, an example of Garro 'embracing verisimilitude, rather than striving to move away from it' (Garro 2014b). *Vanishing Point* (2010) is a composition by Joseph Hyde, intended to explore notions of silence and noise in both audio and video. Within the context of this analysis it will occasionally be referred to in order to demonstrate techniques that are not present in *Dammtor* but require discussion, or to give further context to Garro's specific use of syntax and the dominant discourse of *Dammtor,* offering itself as a point of reference which to relate *Dammtor* to with respect to an overall Visual Music language.

The following analysis will refer to figures that can be found in the List of Figures at the back of this thesis.

5.2. Mimetic potential: Recognition and resistance

5.2.1. Inherent mimetic potential

The musical language of electroacoustic music is inextricably linked to materials' 'associations with the real world, their anecdotal connotations, the narratives involved, and their symbolic or metaphorical power' (Garro 2005:3). This applies also to the Visual Music idiom, perhaps even more so. Visual media particularly is so ingrained into our cultural experience through film, TV and video games that using it in a different context like Visual Music brings about certain challenges when attempting to obscure certain anecdotal or narrative qualities from the visual material. Certain visual material will carry with it stronger 'mimetic potential' (Garro 2014a:1), which is dependent on a degree of universal familiarity. Hyde gives an example of this, writing 'in our everyday lives we are all familiar with the propensity of abstract and random patterns to suggest familiar forms - we might see a face in a mildew stain on a wall, or the outline of an animal in the shape of a cloud' (Hyde 2012:173). Some material is more or less universally recognisable, consisting of natural phenomena that have been present since early human cultural output. In our email conversation, Garro described his 'fascination with the sound of whispers' as he thinks 'speech, water and the human body are elements drawn from nature with the strongest mimetic potential, for obvious reasons related to physical anthropology' (Wood 2017).

Hyde identifies two phenomena that he believes 'are relatively resistant to this form of phenomenological typecasting', despite their prevalence in our perception of the world, and those are 'silence' and 'noise' (Hyde 2012:173).

5.2.2. Silence and noise

Silence and noise, as sonic states, have a number of attributes in common. They are both theoretically definable: silence as the complete absence of sound and noise as the simultaneous presence of all possible sonic frequencies. Despite the fact we often experience phenomena close to these two extremes, neither is found in its absolute form in our environment. Importantly, both are relatively free of associations, 'both with environment around us and within the rarefied world of (traditional instrumental) music' (Hyde 2012:173). Silence and noise could therefore be described as having weak mimetic potential. Hyde posits a visual equivalent of these phenomena in the form of 'visual silence' and 'visual noise'.

5.2.3. Visual silence

Visual silence can be defined as the absence of light, resulting in darkness or 'black'. When the video is left entirely black, it often encourages the audience to focus solely on what they are hearing. *Dammtor* features many examples of this, for example 06:13 - 07:11 in which the sole focus is essentially a 'sonic postcard' of environmental recording, with no visual material present. In this excerpt, the audio encourages the listener to conjure their own image to accompany it. This exemplifies Emmerson's observation that 'by deliberately removing the visual clues as to the cause of sounds, indeed by removing or reducing visual stimulation of any kind, the composer is almost challenging the listener to re-create, if not an apparent cause, then at least an associated image to 'accompany' the music' (Emmerson 1986).

5.2.4. 'Tending-towards-black' and the *objet audiovisuel*

Visual silence does not require the entirety of the frame to be black to be effective, however. Hyde shows an interest in 'material where the majority of the frame is black', or 'tending-towards-black', where other points of interest occupy only a small portion of the frame. Hyde demonstrates this by calculating the cumulative proportion of black in a frame by frame analysis of *Studie No. 6* by Oskar Fischinger, discovering that 97.22 percent of the piece comprises black pixels (Hyde 2012:175). He argues that the significance of the results is not the fact most of the pixels are black, but that most of the pixels are the same and that 'it is this aspect of self-similarity which makes it appropriate to suggest that this work 'tends towards silence' (Hyde 2012:175). Garro frequently makes use of visual silence in his work, and links the technique with his own concept, the *objet audiovisuel* (Garro 2014a:4). An adaptation of Schaeffer's *objets sonores,* Garro describes a visual phenomenology in which 'visual objects' can be described using semantic categories such as 'color, shapes or 'forms', surface texture, granularity… spatial attributes…mise-en-scene, cinematography, photography and perspective' (Garro 2005). He describes visual silence as a method to frame the material within a largely black background to strengthen the material's potential as an *objet audiovisuel* (Garro 2014a:4). In *Dammtor*, this is demonstrated to varying degrees. In the fast, fragmented cuts of 00:53 to 01:23 (see Figure iii), the majority of the visual material has a vignette applied to it, the edges of the material fading into blackness towards the perimeter of the frame. This establishes the material as an object within the frame of the composition, rather than the individual frames and perspectives present in the visual material. Additionally, these cuts are dispersed amongst periods of both complete aural and visual silence, to establish the object further. Another key example is during the welding sequence, specifically from 08:38 to 10:42 (see Figure x). The only visual material visible is the red, orange and white sparks flying off in different directions, where the welded material itself is as black as the

background. This focuses the audience attention on the pure abstract nature of the sparks, rather than the causal origin of the material: the act of welding.

5.2.5. Visual noise

Visual noise, on the other hand is not apparent in *Dammtor*, but it is certainly worth discussing. As visual silence is often described as darkness or black, one might assume that an opposite of this, visual noise, would be white. This is not the case however, in fact visual noise is an opposite of visual silence in terms of the self-similarity that Hyde explored in Fischinger's work. Whilst visual silence has a high self-similarity, visual noise has a very low self-similarity, 'that in any given frame, the pixels will exhibit a maximum amount of difference…if one were to look at any given pixel over time, it would also exhibit a maximum amount of difference' (Hyde 2012:175). White noise can be produced by using a random audio signal, creating a sound that has statistically equal amounts of all possible frequencies. Applying the same principles to visual noise brings about a situation 'where each pixel is of random brightness (and colour, if colour video is being used)', recognisable as 'video snow' (Hyde 2012:175), similar to television static. In the practice of composers like Hyde and Garro, using mostly camera-sourced visual material, absolute visual noise is often hard to find, however tending-towards-noise is explored frequently in Hyde's work. An example of this is in *Vanishing Point*, from 00:12 - 00:35 (see Figure iv), where various cuts of noisy visuals are spliced together. It produces an interesting effect where despite the amount of visual 'data' present, we find nothing anecdotal or referential within the visual material due to its chaotic nature.

5.3. Manipulations and Visual Suspension

5.3.1. Effect of visual manipulation on mimetic potential

Between the poles of universally recognised imagery[4] and visual silence and noise, it is hard to identify a varying degree of mimetic potential for most things when examining the material alone. Rather, the mimetic potential of material can increase or decrease dependent on the manipulation of the material. Visual material is often manipulated to disguise its causal origins, and to encourage a mode of perception similar to that of reduced listening (Chion 1994), aiming to create material that is relatively free of association. Manipulation, however, can also accentuate certain mimetic properties of visual material. Considering Emmerson's definition of 'timbral mimesis', in which the colour of a natural sound is imitated (Emmerson 1986), visual manipulation could help focus on a certain colour or quality of that visual material. An example of this in *Dammtor* is the use of various manipulations such as slow motion, video echo and 'enhanced pictorial quality' (Garro 2014a:4) in the welding sequence from 07:37 - 08:36 (see Figure v). The audience focus is drawn to the sparks produced from the welding process, due to their exaggerated brightness and stylised hues, compared with the silhouette of the welder and the metal. Garro describes the effect of this enhanced pictorial quality, writing that it 'helps re-position mimetic material away from its narrative potential' (Garro 2014a: 4). Additionally, the slow motion and video echo or 'visual delay' further suspends the scene from reality, enabling the audience to focus on the visual phenomenon of the sparks. Slow motion also has another major significance, in regard to its cultural

[4] The term universally recognised imagery refers to the certain visual material with a strong inherent mimetic potential, for example natural images of human beings and common natural phenomena. To quote Garro, 'speech, water and the human body are elements drawn from nature with the strongest mimetic potential, for obvious reasons related to physical anthropology' (Wood 2017). To provide additional context, d'Escriván quotes Rhys Davies' description of 'archetypal sound; the sound of key natural events such as thunder, wind, lighting, 'the roar of a predator' or 'the cry of a newborn" (d'Escrivan 2009: 70)

connotation within media such as film and television, which is explored in a deeper analysis of the welding sequence later in the thesis.

5.3.2. Visual Suspension

The plethora of manipulations used on visual material help to form a language of Visual Music, and allow visual material to be divorced from some of the narrative and anecdotal baggage attached to it. This manipulation can be described as a process of 'visual suspension', a term coined by Hyde as an ocular counterpart to reduced listening (Hyde 2012:173). Hyde describes visual suspension in the context of his discussions of silence and noise, exploring strategies that bring the 'ocular experience' of visual material as close as possible to the ideals of reduced listening, 'focusing on the traits of the sound itself, independent of its cause and of its meaning' (Chion 1994:29), and applying this to video. This compositional methodology is apparent in Hyde's work *Vanishing Point* (2010), as an 'exploration of visual (and sonic) noise' (Hyde 2012:177).

Visual suspension is present in *Dammtor*, however it is perhaps less obvious in Garro's use of visuals. Whilst Garro clearly is not aiming for an equivalent of reduced listening in his visual material, principles of visual suspension still apply to his treatment of the material, as so much of the material has a strong 'narrative pull' that requires some degree of suspension from reality. Additionally, the use of visual suspension techniques such as visual silence and the techniques that will be analysed in the following subchapters signals to the audience the intention for the work to function as a piece of Visual Music, as opposed to a narrative short film. Garro explained the role of visual silence and noise in mimetic Visual Music,

> 'They are the mark of style and craft. They signal intentionality to an audience who is inevitably seeking decoding clues. For example, they tell the audience "… this is not a film, in the cinematographic sense of the word… stop searching for the narrative... you need to look better, listen harder, seek deeper…"'(Wood 2017)

This helps to establish an ‘audiovisual contract’ with the potential audience of the composition, which due to Visual Music’s roots in electroacoustic composition, is likely agreed upon by ‘parties who hold the primacy of the ear and eye together as their artistic credo’ (Garro 2012:106).

5.3.3. Double exposure/matte

In a few particular instances, Garro uses a matte effect, similar to the double-exposure technique in photography in which two images are combined, usually with the second image superimposed onto the white (or black with an inverted matte) areas of the first image. This effect is achieved via grain overlapping in a process of visual granulation, which will be explored further in the analysis; however I have identified double exposure as a distinct technique due to its potential to form interesting mimetic discourse. This creates the effect of merging two images together, an example of which can be seen from 01:24 - 02:20 (see Figure vi), in which the silhouette of a man walking is combined with the texture of rain falling on the ground. Both images are recognisable, although neither occupies the focus of the frame and the combination of the two suspend the realism of both scenes; the sequence depicts more of an impression of the scenes, retaining a degree of abstract interest and a degree of visual suspension from the narrative. This technique could also offer potential to imply a certain relationship between two images that would not be so obvious if the one image cut to the other, or if they were given distinct segments of the frame.

5.3.4. Enhanced pictorial quality

Enhancing the pictorial quality of an image can consist of a broad range of manipulations, essentially anything that can emphasise a certain quality of the image. It can be viewed as an equivalent to ‘common Electroacoustic practices, for instance emphasis on the dynamic range and/or on the spectral qualities of certain sonic streams’ (Garro 2014a:4). Emphasis on the spectral qualities of an image could consist of augmenting certain areas of the colour spectrum, and alterable qualities of the dynamic range of an image could be changes in the movement, scale and position of a visual object in the frame. Almost all of the visual material in *Dammtor* is altered or enhanced in this way, with only a few exceptions where the original material is left apparently unchanged.

A technique used in multiple sequences throughout *Dammtor* is the ‘silhouetting' of visual material. The video footage of a railway bridge or structure from 04:38 - 04:49 (see Figure vii) for example, looks almost like a stencil: a white silhouette of the general geometric properties of the structure against the black background, emitting a faint red glow. This focuses on the overall shape of the image, rather than the specific details that may be recognisable enough to forfeit answers to the audience’s natural search for narrative validity. In doing this, the image implies a railway-related structure whilst still exploring the abstract visual qualities in a way that remains ‘musical’.

Another recurring technique that Garro uses in *Dammtor* is dramatic alteration to the surface texture of the video footage. As the video footage itself is a flat two-dimensional plane, alterations to the texture affect the contents of the footage in the same way, regardless of the perceived differences in depth within the frame. This results in a distinct reminder to the audience that the camera footage is musical material within the composition, as opposed to being watched ‘like a film’. Garro imitates a liquid-like texture through the manipulation of the video clips, for example at 03:48 - 04:24 (see Figure viii), where watery entities float across a black frame. The footage to which this effect has

been applied is barely discernible, with a few exceptions where the recognisable visual material of the welder is apparent. These manipulations form new ‘objects’ from the source material, with their own distinct mimetic qualities. Visual material that once portrayed the act of welding now has qualities that imitate clouds, ripples and bodies of water, starkly different to the original anecdotal connotations of the camera footage. This specific example of pictorial enhancement utilises visual granulation techniques, which Garro uses frequently throughout *Dammtor*.

5.3.5. Visual Granulation

To better understand Garro’s use of visual granulation in *Dammtor*, a brief overview of sonic granulation will be given. Granulation is a process of taking small snippets of sampled sound called grains, usually 50ms or less in duration and reproducing ‘…them in high densities ranging from several hundred to several thousand grains per second’ (Truax n.d.). This can have varied effects, from fragmented pointillistic phrases that use distinct samples in quick succession to the overlapping of grains forming ‘dense granular clouds’ of sound (Garro 2014b). Visual material is processed in a similar way in *Dammtor*, using visual grains to manipulate and re-contextualise the visual material. As Garro discusses in his 2014 article on visual granulation (Garro 2014b), there are two main types of visual granulation: frame-based granulation and particle-based granulation. Both types form key sequences in the composition, each with their own distinct gestural and aesthetic profiles.

The fragmented sequence from 00:53 - 1:23 (see Figure iii) exemplifies the technique of frame-based visual granulation. Here, most of the visual grains are relatively distinct in terms of their mimetic content and geometric size, arranged in dense but non-overlapping pointillistic phrases. This forms a strong musical element, ‘the fragmented images represent the visual extensions of the pointillistic sonic grain, common in much of

the electroacoustic repertoire' (Garro 2014b). Although the mimetic content of each visual grain is recognisable, the speed and musicality of the sequence partially shifts the attention of the viewer from the mimetic discourse present to the '…morphological treatment of the audible and visible gestures instead' (Garro 2014b). This technique is returned to throughout *Dammtor,* at 04:52, 05:36 and 14:17 to name a few examples.

As mentioned above in the discussion on pictorial enhancement, the alterations to surface texture present in the watery entities from 03:48 - 04:24 (see Figure viii) are a result of particle-based visual granulation. A later sequence from 15:19 - 17:15 uses the same granulation effect, however it uses it to 'continually shift the material between reality and abstraction' by means of 'granular de/re-construction' (Garro 2014b). In both of these sequences, the effect is achieved by the 'clustering of spatially and temporally pointillistic specs of images, each with its own duration, time-varying shape, trajectory and chromatic behaviour' (Garro 2014b). This form of granulation has the potential to render visual material as abstract through the segmentation and overlapping/blending of the visual grains. The granular deconstruction of an image is due to these grains, or segments of an image undergoing drastic changes in its duration, trajectory, shape and colour. These changes can then be reversed and the visual grains are returned to their contextual positions within the original video footage through a process of reconstruction. This is most apparent in *Dammtor* from 15:32 - 15:48 (see Figure ix) where the video footage of a hand writing on a piece of paper is reconstructed and deconstructed in one gesture. This shift between abstract and mimetic discourse will be explored further later in the thesis, as it represents vast creative potential for the dynamics and structure of mimetic Visual Music.

5.4. Meta-narrative and Structure of *Dammtor*

Returning to a quote from Garro, ‘an audio-visual language disenthralled from the gravitational pull of narrativity, inevitably flirts with poetry and with its shifts from the tale, to more obscure meta-narratives’ (Garro 2014a:1). Garro specifies this in a description of *Dammtor,* ‘the crux of this film is not the disclosure of a truth hidden behind the poem’s disconnected threads; if anything, it is to linger with our senses over the rifts that the poem opens amidst the strands of an unspoken tale’ (Garro 2013). The manipulative techniques mentioned in the above chapter allow the camera-sourced material in *Dammtor* to be ‘disenthralled’ from some of its narrative baggage, to be re-contextualised and structured according to Garro’s compositional aims. This chapter will look at the structuring of certain sonic and visual material in the context of the composition and the context of other material present in the composition, as well as how this context affects the mimetic potential of certain material.

5.4.1. Motivic Structure

To aid with the analysis of *Dammtor* on a structural level, the ‘scenes’ or ‘sequences’ can be identified as motifs for the purpose of this thesis. Similar to instrumental music, the motifs in *Dammtor* are subject to repetition, variation and development that form the structure of the piece. The motifs are distinguishable more by their gestural and phenomenological profiles than their mimetic content, for example the fragmented examples of frame-based granulation or the technique of double exposure. The mimetic content often varies amongst motifs and repetitions of motifs, yet this content seems to be chosen from a relatively small pool of material, perhaps one of the few similarities *Dammtor* shares with Hyde’s approach to Visual Music making. To make somewhat of a crude generalisation, the structure of *Dammtor* can be considered to be in sonata form.

The piece is split into three parts, with their own subtitles and pauses in-between parts. Parts one (A) and two (B) feel distinct in terms of content and pace, whereas part three (A') recapitulates a number of the motifs introduced in part one, albeit in a different order with significant variations.

5.4.2. Part One

The fragmented pointillistic sequences at 00:52 - 01:24 (see Figure iii), silhouetting at 04:38 - 04:49 (see Figure vii), double exposure at 01:24 - 01:34 (see Figure vi) and watery particle clouds at 03:48 - 04:24 (see Figure viii) are the main visual ideas featured in part one of the composition. Whilst introducing the main audio-visual gestures that will form the language of *Dammtor,* these also introduce the audience to the recognisable, mimetic content of the piece. Even before the voiceover reading the poem is introduced at 02:19, the piece presents images of trains, train stations, human features such as eyes and a female face, rain falling on the ground and the silhouette of a man walking. By presenting these specific images in the form of audio-visual gesture, the audience has a narrative framework in which to place the rest of the composition, yet without a sense of cinematographic narrative. The focus on the audio-visual qualities themselves allows the mimetic content to seep into the experience of the audience, without prompting too much of a search for 'narrative validity', or the question of 'why are those objects, people, landscape being shown?' (Garro 2014a:3).

5.4.3. Part Two

Part two focuses almost entirely on one distinct motif in the 'welding sequence' from 07:13 - 10:56 (see Figure x). The image of the welder is briefly shown in part one at 03:52 (see Figure xi), but is heavily disguised through the process of particle-based granulation, giving the focus on this material in part two a sense of distinction from the mimetic

content of part one. The fact that the majority of part two focuses on this one slow, gradually evolving motif, contrasts with the frequency of the introduction of different motifs in part one and gives it the sense of a 'B' section. This part also offers one of the furthest departures from mimetic discourse and the presence of the meta-narrative in *Dammtor.* Despite the fact that the visual material of the welding is mimetic in nature, the extended study of the sparks with no drastic cuts or changes in gesture encourages a trance-like state of focus on the audio-visual elements of the sparks. The slow motion applied to this sequence is particularly effective in achieving this, partly due to the cinematographic connotations it has. Garro explains this in more detail,

> 'Slow motion can shift real-life footage above (or aside) the strictly anecdotal, into a meta-narrative state typical of poetic expression. Such shift may well be caused by our culturally acquired response to cinema and television, where slow motion, accompanied with suitable atmospheric music is often used to stress the dramatic and emotional intensity of a certain scene' (Garro 2014a:3)

The music accompanying this sequence is indeed atmospheric, moving away from mimetic discourse into aural/ocular discourse, which will be discussed further later in the analysis.

5.4.4. Part Three

As mentioned above, part three recapitulates the main visual ideas introduced in part one, often in combination with one another or significant variations. For example, the first sequence at 11:10 (see Figure xii) we see in part three is a combination of the bridge silhouette (see Figure vii) and the double exposure technique (see Figure vi) from part one. The next distinct motif from 13:14 - 15:17 (see Figure xiii) combines the frame-based granulation fragmented sequences from various points in part one (see Figure iii) with the

textural particle-based granulation techniques forming the abstract, watery like entities from 03:48 (see Figure viii). The recurrence of these motifs gives the piece coherence; although the ordering and combination of mimetic content and audio-visual gesture changes, the recognisability of the visual material from part one following the departure from it in part two rounds off the piece to a satisfying conclusion.

5.4.5. Spoken Word

Another element of *Dammtor* that is integral to the structure of the piece is the spoken word extracts from the Sheard poem (Sheard 2010) itself. Elements of the human voice, such as specific syllables and plosives are used as sonic material throughout the piece, especially synched up to the pointillistic sequences throughout parts one and three. The use of a loud and clear voice track over the top of the aural and visual streams adds a third medium to the composition, distinct from the other sonic elements despite both occupying the aural domain. The spoken word and the other vocal elements such as the abstract, musical treatment of whispered plosives in certain parts of the work are fundamentally different in terms of syntax, which will be discussed later in the analysis.

On the topic of structure, the use of the poem strengthens the sense of an A B A' structure throughout the piece. Part one features the complete poem, read in its entirety in a male voice from 02:08 - 03:38. This exposition of the poetic ideas in the spoken word ties in with the introduction of audio-visual motifs of part one, establishing the meta-narrative. As discussed above, part two offers an extended study of a specific excerpt of visual material, the welding sequence. The spoken word reflects this, using a short, specific excerpt of the poem, “Places to watch, a welder in the high girders. His flaring iris hissing shut.” (Sheard 2010). Additionally, in contrast to part one where spoken word extracts are used multiple times, the spoken word in part two occurs at the beginning of the movement only, from 05:55 - 06:21, allowing the remainder of part two to focus on an

aural/ocular discourse. Part three, similar to part one features the entirety of the poem, however now a female voice is used. This simple variation to part one demonstrates the transformation the mimetic material is going through from part one to part three, reminding the audience that ‘something has changed’.

5.4.6. Effect of ‘context’ on mimetic potential of materials

The establishment of the meta-narrative in *Dammtor,* through the imagery evoked by the poem and shown in the initial visual material, opens up interesting options for utilising the mimetic potential of concurrent material. Garro outlines that ‘the importance of at least some degree of gestaltism has been highlighted by many theorists and practitioners seeking to integrate sounds, music and images into a cohesive synergetic construct’ (Garro 2012:107). Gestaltism looks at the idea of the organised whole being perceived as more than the sum of its parts. With this in mind, it can be argued that the underlying meta-narrative can cause an audience to perceive the other material used in the composition as related to the established meta-narrative, i.e. the assumption that certain material is linked intrinsically to *Dammtor*’s core themes will give the materials possessing aspects of those themes stronger mimetic potential. An example of this could be the silhouette motif at 04:39 (see Figure vii). In isolation, little is given away of the mimetic content of the material; it is simply a pattern of geometric shapes in black, white and red glow. In context with the meta-narrative, however, with the prior knowledge that the piece uses themes of a train station, we as an audience can more easily decode the material as the imitation of a train bridge. This effect also adds contrast to material that is unrelated to the meta-narrative, for example the abstract particle-based granulation clouds at 03:50 (see Figure viii). The departure from the established themes creates a dynamic shift of the audience’s experience from a mimetic discourse to an aural/ocular one.

5.4.7. Audio-visual discursive strategies

In addition to the relationship between the perception of visual material and the meta-narrative, the relationship between the visuals and the audio can also affect how the audience associates the material within the context of *Dammtor*. The phenomenon of 'culturally acquired synchresis', a term coined by Michel Chion (Chion 1994:63) which can be described as 'the tendency to ascribe special correlations to sounds and visuals purely on the basis of their simultaneity' (Garro 2012:106), can be an effective synchronisation technique when trying to suggest coherence in contextually unrelated audio-visual streams. Synchresis is often used in mimetic Visual Music such as *Dammtor* to integrate mimesis into 'musical' audio-visual gestures. An obvious example of this is the use of fragmented whispered plosive sounds that are synchronised with the frame-based granulation sequences from 00:52 - 01:22 (see Figure iii). The audio itself does not borrow from the visual imagery, yet their simultaneity creates a link between the audio and visual materials that goes on to be repeated and developed throughout the composition. There are a number of other strategies for forming relationships between the audio and visual material, for example coalescing strategies. "Coalescing' strategies are those which seek to establish audiovisual discourses principally through morphological convergence of the sonic and visual streams in most parts of a visual work (Garro 2012:108). This connection often seeks to form a recognisable pattern of phenomenological behaviours between the audio and visual components. The repetition and development of the fragmented motif and its synchretic relationship could be an example of a coalescing strategy in this case, although Garro points out that 'coalescence does not necessarily imply synchresis' (Garro 2012:108). Coalescing strategies are perhaps more suited to works that focus on specific manipulations to a limited pool of materials, such as Hyde's *Vanishing Point.*

Two other strategies for discursive audio-visual associations are posited by Garro, that often used in *Dammtor* and appropriate for mimetic Visual Music: 'contextual' strategies and 'allegorical' strategies (Garro 2012:108). Contextual strategies rely on the audience's interpretation and reading of the material used, where links between the audio and visual streams contribute to the 'global discourse' or meta-narrative 'predominantly on the virtue of coexisting within the context of the same artefact' (Garro 2012:108). This occurs pre-emptively in part one of *Dammtor* during the double exposure sequence from 01:23 to 02:20 (see Figure vi). The visuals of a man walking and rain falling on the ground are combined with the manipulated yet still recognisable sounds of a moving train and its horn. This sequence is immediately followed by the introduction of the spoken word poem, providing context to the links between the audio and the visuals in the sequence before it.

Allegorical strategies utilise a higher degree of synchronisation than contextual strategies, but not to the level of focus that coalescing strategies may entail. Audio and visual material typically function as 'metaphors of one another on the basis of general descriptive categories' (Garro 2012:108). An example of this is found during the welding sequence in part two, in which from 08:40 - 10:24 (see Figure x) an ambient granulated chord imitates the movement and behaviour of the sparks, as the frequency of the sparks flying off the metal more or less matches the grain size of the granulated audio. This strategy allows the creation of coherent and mimetically potent audio-visual gestures, without locking the composition into a limited focus and allowing a meta-narrative to develop.

5.5. Language: discourse and syntax

5.5.1. Dominant discourse and syntax in *Dammtor*

Dammtor is a piece that clearly focuses on mimetic discourse, in which the audience is encouraged to reconstruct mental imagery and form meta-narrative from the sonic and visual material used in the composition. As discovered in the analysis, the piece also forms audio-visual relationships based on the specific visual or acoustic properties of the materials to create effective musical gestures. Emmerson's exploration into the musical language employed in electroacoustic music (Emmerson 1986) helps to explore and define the syntactical relationships between materials in *Dammtor.* A grid (see Figure ii) is used by Emmerson to demonstrate the different combinations of discourse and syntax through case studies of electroacoustic compositions that exemplify the different combinations. Works with a dominant mimetic discourse all had a common factor that they had 'aims apparently outside those traditionally accepted as 'musical'' (Emmerson 1986), which arguably includes *Dammtor* with its focus on the formation of meta-narrative and evoking the imagery of Sheard's poem.

Specifically within the categorisation of 'mimetic discourse dominant' works, *Dammtor* shows examples of a 'combination of abstract and abstracted syntax'. Emmerson uses Trevor Wishart's *Red Bird* (Wishart 1978) as a case study for this combination of discourse and syntax and a number of parallels can be drawn between *Red Bird* and *Dammtor* based on Emmerson's observations. On *Red Bird* Emmerson writes,

> 'the final order and combination of sound-events is strongly influenced by what is effectively a 'story line', while the composer retains an aural judgement as to the exact nature of many of the studio montage procedures. The work thus combines elements from 'abstract' and 'abstracted' syntax poles' (Emmerson 1986)

As discussed in the previous chapter on meta-narrative and structure, this description of *Red Bird* can arguably be attributed to *Dammtor,* with its meta-narrative or 'story line' emerging from the audio-visual gestures themselves.

5.5.2. Abstract syntax and Image Transformation

Another specific similarity between the two pieces is the use and development of the idea of 'image transformation'. In *Red Bird,* 'words 'become' birds, clock ticks 'become' the slamming of the prison door'. An example of image transformation in *Dammtor* occurs both sonically and visually at 05:05 - 05:32 (see Figure xiv), where an abstract swirling pattern morphs into the recognisable silhouette of power lines passing overhead. The transition from the abstract to the mimetic here demonstrates the dynamics possible between abstract and mimetic discourse in 'mimetic Visual Music'; the overall gesture of the emerging recognisable silhouette of the power lines from the swirling abstract patterns demonstrates a use of abstract syntax to serve the transformation from abstract material to mimetic, using the relationship between the abstract visual qualities of the 'swirls' and the power lines to form the gesture. The sound accompanying this section demonstrates sonic image transformation very similar to Wishart's transformative transitions of recognisable sonic imagery. A rhythmic repetition of the plosive 't' demonstrates the syntactic mimesis of a 'chugging' train. Throughout the visual emergence of the moving power lines, the plosive rhythm cross-fades with the recorded sound of a moving train, rhythmically in sync. Although Garro uses simpler volume manipulations to achieve the transformation of sound image than the more complicated spectral transformations employed in *Red Bird,* the resulting transition is still effective. Importantly, the fact that this transformation uses the inherent rhythmic qualities of the sound to form the sonic gesture demonstrates an abstract syntactic relationship.

5.5.3. Abstracted syntax and Montage

The sonic ‘musical’ material used throughout the rest of *Dammtor* consists largely of mimetic sounds that relate to the meta-narrative, unintelligible vocal whispers, sounds associated with trains and train stations and other sounds that refer to the real world. As stated already, the work has a dominant mimetic discourse, yet often uses abstract syntax within gestures as a vehicle to serve the overall mimetic discourse and meta-narrative. There are also sequences within *Dammtor* that use a pure abstracted syntax to serve the mimetic discourse of the work. For example, 06:22 - 07:12 uses what sounds like a single unedited environmental recording, or is structured to create a sonic montage that refers to traversing an industrial, metallic environment. This follows the spoken word excerpt ‘places to watch a welder in the high girders’ (Sheard 2010), putting the audience in the perspective of the ‘narrator’, and signalling a focus on the narrative. The exposition of the entire poem before this, in part one, includes this excerpt in larger context: ‘You thought, of places to be broke in, too late to go home from. Places to watch, a welder in the high girders’ (Sheard 2010). This sonic montage can be interpreted as directly referring to the act of breaking into the place that Sheard describes the poem, as the sequence is followed by the extended study of welding from 07:13 - 10:56 (see Figure x) discussed earlier in this analysis. The syntax therefore is abstracted, as the material is structured to serve a ‘non-musical’ aim of evoking the narrative imagery of the poetic extract.

5.5.4. Treatment of Spoken Word and its effect on perception modes

Visual Music is multi-mediatic by definition, however *Dammtor*'s use of spoken word has an interesting effect on the modes by which the audience experiences the piece. The addition of clear spoken word commands a degree of subservience from the other sonic and visual material in excerpts of the composition, which strongly shifts the audience's attention to the narrative aspect of the composition. Garro describes this effect in a hypothetical example that relates closely but does not directly refer to *Dammtor,*

> *'*For example, technically speaking we can mix together a wide variety of audible material: a purely abstract synthesised tone, the recording of a forest ambience, and a voice reading a poem.' … 'The audience will have no choice but to engage in continuous shifts in decoding strategies, making sense of the narrativic implications of the forest virtual space, establishing links between the spectromorphological properties of the various abstract tones and the whole, and, especially, relating empathically to the message and the emotions conveyed in the spoken word, moving on to consider anything else only when their ineluctable anthropological interest in meaning has been satisfied (Chion 1994: 6)' (Garro 2012:105)

The treatment of the non-spoken word material in the excerpts that feature the poem shows a consideration of the effect the spoken word has on the audience. Two instances of spoken word, 04:34 - 04:51 and 06:13 - 06:21 are accompanied with a black screen - or visual silence, and negligible audio. This allows the audience to focus on the narrative of the spoken word without interference from material that may use synchretic, contextual or allegorical audio-visual strategies to provoke other modes of experience. The two other spoken word excerpts in *Dammtor* feature sonic or visual material occurring simultaneously with the spoken word. The excerpts, 02:19 - 03:39 (see Figure xv) and 11:10 - 12:40 (see Figure xii) use visual material that takes up the majority of the frame and avoids dynamic changes in movement, chroma or any other elements that may

distract too much of the audience's attention. Referring back to Hyde's definitions of visual silence, these excerpts have a similar effect to the black screen segments due to the high degree of 'self-similarity' over time, each pixel remaining more or less the same over the period of time the spoken word occurs. As so much of the mimetic material throughout *Dammtor* refers to the content of the poem, these techniques that ensure the audience is able to clearly identify the meta-narrative are vital to the success and coherence of the piece.

5.6. Conclusion

Ultimately, *Dammtor* aims to tell a story. The story is not presented in a conventional narrative structure, instead fragments of that story are played with: manipulated, re-contextualised and re-told in the fashion of an audio-visual poem. This story is told through the employment and treatment of mimetic sonic and visual material that carries with it references to its causal origin. Audio-visual relationships between the sonic and visual material are established through various discursive strategies, forming an audio-visual language that acts as the vehicle for presenting the narrative ideas of the work. Garro's consideration of the effect the different audio-visual discursive strategies have on the way the audience decodes the message in *Dammtor* is apparent in the structuring of audio-visual motifs and in the syntax of the composition.

6. Original Composition: *homo.chrysalis*

6.1. Concept

Throughout this thesis the concepts of mimesis and meta-narrative in Visual Music have been explored in theory and in the context of *Dammtor.* The knowledge gained from this process has influenced the beginnings of my own Visual Music practice, in the form of an original composition titled *homo.chrysalis*. The title takes the Latin word 'homo' as the human genus and 'chrysalis' as the stage of insect metamorphosis where significant transformations take place. This encapsulates the narrative aims of the piece, to explore ideas of transformation using the life cycle of a butterfly as a loose structure to the composition. This cycle is also used as a metaphor to demonstrate 'transhumanist' ideas of the evolution from 'man' to 'machine'. These ideas have come as a result of reading *To Be a Machine* by Mark O'Connell (O'Connell 2017), which includes a commonly explored theme that the current state of the human species is on the brink of evolving into a higher, technologically augmented species. The following overview and analysis of the composition will refer to figures that can be found in the List of Figures at the back of this thesis.

6.2. Visual Material

The transhumanist meta-narrative[5] is intended to be an emergent byproduct of the use of sonic and visual material, their context within the composition and the degree of manipulation employed. The visual material can be split into two main categories: the insect (camera footage of caterpillars, chrysalises and butterflies) and the human (old family home video recordings). The combination of this visual material throughout the

[5] I use the term transhumanist meta narrative here to describe the intention, that the meta-narrative that I hope forms from the materials used in *homo.chrysalis* and their inter-relationships, is one that demonstrates the 'transhumanist' ideas of an evolution from 'man' to 'machine', inspired by reading *To Be a Machine* (O'Connell 2017).

composition signifies that there are two parallel narrative paths in *homo.chrysalis*, the insect transformation and the human transformation. The transformation of the insect is apparent in the mimetic content, using the imagery of caterpillar, chrysalis and butterfly to indicate progression in the structure of the composition. The human transformation is metaphorically implied, dependent on the treatment of the 'human' visual material. Using specific visual suspension techniques to obscure and corrupt the 'natural' mimetic content of human beings in the visual material, the content is transformed into something more 'digital' and abstract.

6.3. Sonic Material

The sonic material can also be split into the two categories of 'insect' and 'human'. The 'insect' sounds are in the form of a variety of manipulated electroacoustic sounds that attempted to refer to scratching, hatching and other insect-like gestures. The 'human' element is achieved through the use of whispers, a decision directly influenced by Garro's use of plosives in *Dammtor*. The whispers are extracts from David Britton's poem *Metamorphosis: A Rebirth of Spirit* (Britton n.d.), which Britton gave me written permission to use via email. The use of manipulated samples of string quartet tremolo strings and low, pitch manipulated piano add contrasting elements to the overall sonic palette of the composition. Although not directly related to the mimetic material, the undulating swelling of the string quartet and the droning of the piano tones are intended to function as allegories (referring to Garro's 'allegorical discursive strategies' (Garro 2012:108)) of the slow, organic pace of evolution that underpins the meta-narrative. The use of this material creates an abstract 'musical' discourse that complements allegorically but potentially contrasts modally with a dominant mimetic discourse in the visual material. With the addition of recognisable spoken word in the whispered poetic extracts, the multi-

mediacy of the composition provokes a number of potential modes of experience from the audience.

6.4. Technical Processes

The general structure of the piece was drafted on paper as a loosely storyboarded timeline of events that I intended to include in the composition; however the majority of the initial structuring process for the composition was done in Ableton Live 9. Live's Arrangement View (see Figure xvi) allowed me to clearly see the structure of the piece as I arranged the sonic material, allowing for a broader view of the overall shape of the composition. The process was similar to my electroacoustic compositional process, a process that is already very 'visual' mentally, but the fact that the work was intended to be Visual Music called for careful consideration of the role of video at all times. This included decisions on whether there were would be moments of audio silence accompanying video, whether the screen would be black during other excerpts and whether there would be specific synchretic relationships between the rhythms of the video and the audio.

Once a final draft of the composition was completed, I brought the audio into Final Cut Pro, video editing software with a similarly clear timeline-based workspace (see Figure xvii) to structure the video. Prior to this process, I had collected and recorded my visual material and had organised it into the thematic categories of human and insect. Final Cut Pro allowed me to find appropriate material to match the storyboard and sonic structure of the piece, using unedited placeholder footage to further solidify a structure before delving into the video editing process and developing the audio-visual language of the composition. Some of the visual language employed was produced in Final Cut Pro, for example fades to black, complex double and triple exposure composites, flexible time stretching of video to fit sonic ideas and an interesting kaleidoscope effect that proved

integral to the third section of my composition, which will be expanded on later in the chapter. The timeline view also streamlined the process of accurately syncing up video clips to the audio in the more synchretic passages of the composition.

The main tool for achieving more complex visual manipulations, however, was Adobe After Effects. The learning curve for this program was steeper than any of the other technical processes I had experience with, so my 'palette' of visual effects was somewhat limited at the beginning of the composition process. One of the key processes that After Effects offered was the ability to create masks such as feathered vignette masking and using the luminosity of the visual material to dictate certain manipulations through the Luma Matte process. The process of particle-based granulation was also a key element of my composition that After Effects enabled me to include in the visual palette of the piece. These processes and several others will be explored in more detail later on, referring to specific examples in the work. Importantly, the keyframe based animation process at the core of the After Effects workflow (see Figure xviii) allowed for smooth controlled and gestural changes in a high number of visual properties, including manipulations to the colour spectrum, opacity, geometrical position and scale of the camera footage, obscuring and preparing the material for the context of Visual Music.

6.5. Structural Decisions

As mentioned earlier, the transformation from caterpillar, through chrysalis, to butterfly is used to give a three-part structure to the composition, each section based on each stage of the insect metamorphosis. Initially, I had intended the three movements to be separated with individual subtitles, as Garro does in *Dammtor,* however I discovered the evolving nature of the final arrangement worked better without marking out obvious boundaries between the sections. Similar to *Dammtor*, *homo.chrysalis* was structured in a loose ABA' sonata form, in terms of the type of gestures used in the sections and their

overall pace. Parts one and three both evolve slowly and organically, using common visual material and a range of musical similarities in the droning, sustained instrumental sounds, yet there are variations in part three's treatment of the sonic and visual material. Part two features sound more sporadically, with pointillistic, fragmented visuals and a larger degree of visual silence. The structure of the piece reflects the meta-narrative; the caterpillar (part one) and butterfly (part three) stages involve the least physical transformation in the cycle of insect metamorphosis, with the majority of the transformative process happening in the chrysalis (part two).

6.6. Visual Suspension

A selection of specific techniques that I deem vital to the success of *homo.chrysalis* will be explored, examining how the techniques suspend the visual material from some of its narrativity and maintain a coherent audio-visual language throughout the piece.

Visual silence is used to varying degrees throughout the composition. 05:37 - 05:58 for example uses complete darkness to reflect the meta-narrative in the preceding whispered spoken word extract 'hidden from the eyes of men, as it has always been', focusing the audience's attention on the string swells that accompany the visual silence. Similar to *Dammtor*, visual silence is also used in the form of vignette filters over visual material to establish them as audiovisual objects (Garro 2014a:4). An example of this is from 04:45 - 05:37 (see Figure xix), the chrysalis imagery occupying the centre of the frame, the borders of the camera footage blurring into the boundaries of the compositional frame. This extract, alongside the hatching sequence from 06:12 - 07:10 (see Figure xx), exemplifies a novel way of integrating visual silence into video footage, through the use of After Effects' Time Difference effect. The Time Difference effect creates a duplicate of the video footage and layers it on top of the original footage. If the Time Difference process detects that the video pixels retain a degree of similarity in both the

original and the duplicate layers at any given time, they cancel each other out, resulting in black pixels. By delaying the duplicate layer by a certain duration, the subtle differences in movement, for example camera shaking or subject movement, reveal the contents in the frame in a flickering, outlined style - with a large proportion of the frame remaining black due to the mostly static camera-work employed in these sections.

An array of pictorial enhancement processes were used to treat the visual material of *homo.chrysalis.* Particularly, the strong inherent mimetic potential of the 'human' visual material required a degree of suspension from its causal origin, as the focus was on the idea of 'humans' rather than the specific narrative context of the family home videos used. After Effects provided an effective solution in its Vector Blur effect, applied to the majority of the home video material. As one might expect from a blur effect, the details of an image are softened and are rendered less discernible than before. Vector Blur allows for the retention of some of the important mimetic qualities of the image by detecting patterns in the image, identifying what directions the gradients are going in. This preserves the outline of general changes in colour, for example what separates the image of a baby from the white background from 00:27 - 01:20 (see Figure xxi). Another recurring technique in the composition is the compositing of multiple visual layers to create abstract textures and montages, similar to Garro's use of double exposures in *Dammtor*. This is the foundation of the sequence at 01:20 - 02:40 (see Figure xxii) of *homo.chrysalis*, in which two montages of home videos are blended with footage of a caterpillar, the changing mimetic imagery constantly in flux. The key effect used to create this composite was After Effects' Luma Matte, which uses the luminosity of an image to define which parts of the image will be transparent and which will be opaque. When applied to complex images, such as camera recordings with a large degree of difference in luminosity across the pixels, the images combine in interesting ways, creating shifting silhouettes of the visual material.

The final category of manipulative process that will be examined in the context of *homo.chrysalis* is that of visual granulation. Taking influence from *Dammtor,* granulation is featured prominently in both the video and the audio, and visual granulation is used in both its 'frame-based' and 'particle-based' forms (Garro 2014b). The use of frame-based visual granulation in *homo.chrysalis* is similar to its use in *Dammtor.* Introduced in part two of the *homo.chrysalis* from 04:18 - 04:45 (see Figure xxiii), fragmented grains of mimetic visual material are arranged in pointillistic gestural passages, linked to the audio through synchresis with the fragmented plosives of the whispered human voice. This recurs later in part two, with variations to the size, position and ordering of the fragmented visual material. The composition features the use of particle-based visual granulation at 09:28 - 10:09 (see Figure xxiv), granulating the visual material surrounding the silhouette of a butterfly into colourful, fibrous grains. This combines the mimetic image of a butterfly with the abstract, rain-like movement of the fibres, demonstrating the use of abstract syntax as a vehicle for mimetic discourse. A less obvious example of visual granulation is the kaleidoscopic effect used in part three, at 07:10 - 07:40 (see Figure xxv) with the butterfly wing patterns and from 10:33 to 11:50 (see Figure xxvi) demonstrating the evolving recapitulation process of previous visual materials from part one. Examining this second example in terms of granulation, the visual material of the chrysalis from 02:40 - 04:12 (see Figure xxvii) is split into three identical visual grains, and rotated about the centre of the frame to create the kaleidoscopic effect that forms the abstract syntax from the mimetic material of the chrysalis.

6.7. Discursive and syntactical decisions

A number of discursive and syntactical decisions were made in the compositional process of *homo.chrysalis*, some of which have been touched on in the previous exploration of manipulation. A few more of these decisions will be examined in the following section.

As discussed previously, synchretic relationships are used between the audio and visual, for example from 04:18 - 04:45 (see Figure xxiii). The synchretic sonic and visual material in this excerpt is often reused in a non-synchretic context, challenging the synchretic association of the material and re-contextualising it. Garro writes about Jean Piché's 'highly syncopated interplay between the sonic and the visual textures' in his piece *Australes* (Piché 2011), explaining that Piché often avoids synchresis, regarding it as 'an obstacle to Visual Music expressive potential and, in the worst cases, as an artistic tautology' (Garro 2012:107). *homo.chrysalis* took inspiration from this line of thought, for example the detachment of the granulated video fragments from 06:45 - 07:10 from the pointillistic plosive audio that had previously been associated with it through synchresis. Another example that challenges the associated links between material is through the use of fades to black. It is often assumed that a visual fade to black will be accompanied by fade to silence in the sonic material. This assumption is challenged multiple times throughout the composition, with prominent examples at 03:36 and 04:05 (see Figure xxvii) of the chrysalis sequence of part one. This is particularly effective as the assumption that these fades will be synchronised stems from its use in cinematography; doing the opposite of this emphasises the fact that the work is Visual Music, not a film.

homo.chrysalis makes frequent use of 'allegorical discursive audio-visual strategies' (Garro 2012). As mentioned earlier, the use of string quartet and pitch-shifted piano are justified as general allegories of the evolving, transformative nature of much of the visual material and of the meta-narrative underlying the composition. A more specific

example can be found at 10:09 - 10:19 (see Figure xxv) in the kaleidoscopic ‘butterfly wing’ transition between the butterfly silhouette motif and the kaleidoscopic chrysalis sequence. The flickering, noisy nature of the visual material is reflected metaphorically by the granulated rainstick-like sonic gesture that accompanies it. ‘Contextual discursive audio-visual strategies’ are also used in the composition. The slight glitches in the use of strings in part three of the composition from 10:33 - 11:50 (see Figure xxvi) can be viewed as a representation of the movement from the natural to the digital that is implied through the manipulation of the existing chrysalis material. Although these glitches are not synched up with glitches in the visual material, the sonic corruptions are designed to evoke the idea of digital corruption in the audience’s experience of the work.

Part one of the composition, 00:00 - 04:18, arguably uses distinct types of syntax in the sonic and visual domains. The visual material of part one establishes the meta-narrative and creates mimetic discourse through an abstracted syntax; the structure of the material aims almost entirely to reflect the narrative ideas of the composition. Contrastingly, the simultaneously occurring sonic material includes negligible mimetic content that relates to the meta-narrative; instead it is structured with more of an abstract syntax, with a loose allegory to the transformative nature of the piece. As the piece progresses, these independent domains begin to synchronise. Part two uses a more synchretic audio-visual syntax that is mostly abstracted, as both the visual material and sonic material relate clearly to the meta-narrative, through the imitation of insect-like sounds and the use of whispers. Part three returns to more of an abstract syntax, featuring variations of some of the sonic material from part one, for example the strings at 02:40 - 04:12 and its variation from 10:33 - 11:50. Contrary to part one, the visual material is also structured with an abstract syntax, through the kaleidoscopic transformation of the existing material. To return to Emmerson’s classification of works (Emmerson 1986) in the grid of ‘musical discourse’ (see Figure ii), I argue that *homo.chrysalis* would be classified

in the same category as *Dammtor*: a work that demonstrates a dominant mimetic discourse, using a combination of abstract and abstracted syntax.

7. Conclusion

The process of composing *homo.chrysalis* contributed greatly to the elucidation of many of the ideas and theories explored in this thesis which surround a compositional practice of mimetic Visual Music. In fact, the entire research process can be thought of as a 'genetic' approach to the final composition. Garro describes this approach in our email conversation, explaining that 'The 'genetic' approach looks at the way a work is generated and relies on complex data about the compositional process (materials, versions, composers' notes, etc)' (Wood 2017). This includes the qualitative research synthesis of Garro, Hyde and Emmerson's writings that provided a foundation of knowledge on Visual Music language, mimetic discourse, meta-narrative and a wealth of techniques to integrate visual material into a coherent composition. The analysis of *Dammtor* also contributes to this process, applying the theory gained through the prior research to contemporary work, providing necessary context to the theories and enabling me to integrate them into my own composition. Finally, the experimentation with my own audio-visual language influenced by my own creative practice, the process of learning to work with visuals through Final Cut Pro and Adobe After Effects and the theoretical framework established through the writing of this thesis has resulted in a piece of original Visual Music that demonstrates a creative contribution to the field, and tangible evidence of my progression as a composer.

Returning to the research questions posed towards the beginning of the thesis, findings on mimesis, meta narrative and the aesthetic context of a Visual Music practice defined by the compositional process of Garro's Dammtor, and my own composition homo.chrysalis.

Firstly, how is mimesis achieved and utilised in Visual Music? The use of mimesis and treatment of mimetic visual materials has been proven to be highly dependent on the visual suspension of the material. The array of visual manipulation strategies used in

Dammtor and in homo.chrysalis demonstrates the importance of visual suspension within mimetic discourse dominant composition that harness verisimilitude and the narrative of visual material, despite the fact that the concept of visual suspension is described by Hyde as a means to ‘offer the possibility of an alternative both to traditional musical language and what Schaeffer might term the ‘dramatic” (Hyde 2012:174).

Secondly, how is meta-narrative formed in Visual Music? Meta-narrative is formed from the relationship between manipulated, re-contextualised visual material and the sonic material present in the composition. Through the audio-visual discursive strategies explored in the thesis, links between the mimetic materials can be made, forming a web of associations and references that contribute to a kind of gestalt ‘whole’ in the form of an understood meta-narrative. These strategies have been analysed regarding their use in Dammtor, and are at the core of the structuring process of homo.chrysalis, using allegories and references within the sonic and visual material to portray the desired narrative of transformation and transhumanism.

Finally, How does the focus on mimesis and meta-narrative in a Visual Music practice effect the overall aesthetic profile of the piece in context within the wider repertoire of Visual Music? The contextualisation of Dammtor and homo.chrysalis within Emmerson’s theoretical framework regarding discourse and syntax demonstrates that although the focus of mimetic Visual Music may be the ‘story’ it is trying to tell, the story is often told through the use of a broad audio-visual language that is common to the majority of contemporary Visual Music, that considers concepts drawn from, or based on, electroacoustic traditions such as visual suspension as an extension of reduced listening, and abstract syntax.

I will conclude the thesis by reflecting on an answer given to me by Garro when asked about the role of reduced listening and visual suspension in his practice,

> They are all valid approaches and ideally there is much to learn from all of these approaches. I have developed a compositional praxis that continuously looks at the work which is taking shape from all these angles: I like exploring the mimetic valence of the materials, but I also want the compositions to stand the scrutiny of reduced listening and I do try to look at my own ‘genetic’ process as I go through it. (Wood 2017)

The message I have taken away from this quote is that despite the analysis and categorisation of different Visual Music work and their often distinct methodological approaches, as a composer I will strive to consider my work from all possible perspectives, embracing the inevitability that my compositional practice in Visual Music will take influence from the wide range of contemporary creative output.

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Some materials have been removed due to 3rd party copyright. The unabridged version can be viewed in Lancester Library - Coventry University.

- **Figure vi** *Dammtor* 01:24 - 02:20 (Garro 2013)

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- **Figure vii** *Dammtor* 04:38 - 04:49 (Garro 2013)

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- **Figure viii** *Dammtor* 03:48 - 04:24 (Garro 2013)

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- **Figure ix** *Dammtor* 15:32 - 15:48 (Garro 2013)

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- **Figure x** *Dammtor* 07:13 - 10:56 (Garro 2013)

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- **Figure xi** *Dammtor* 03:52 (Garro 2013)

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- **Figure xii** *Dammtor* 11:10 - 12:40 (Garro 2013)

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- **Figure xiii** *Dammtor* 13:14 - 15:17 (Garro 2013)

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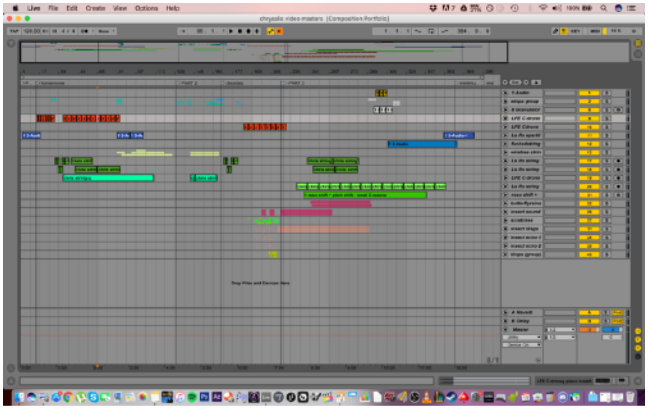

- **Figure xvii** *Final Cut Pro Timeline*

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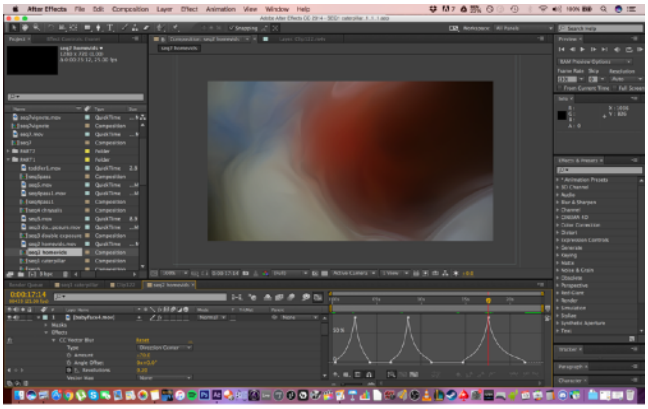

- **Figure xix** *homo.chrysalis* 04:45 - 05:37

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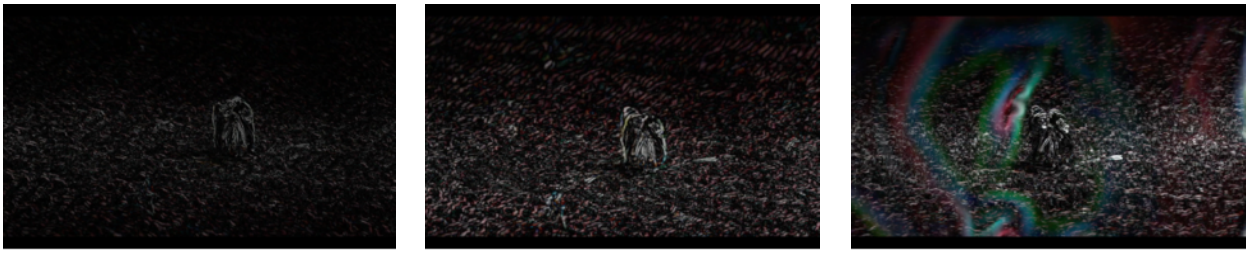
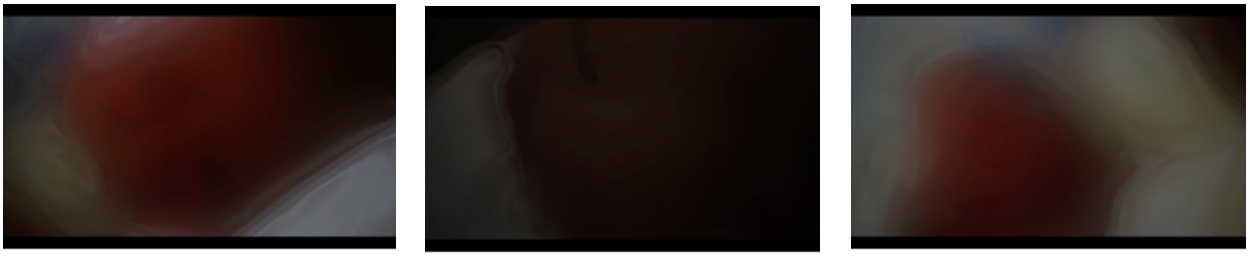


- **Figure xxi** *homo.chrysalis* 00:27 - 01:20



- **Figure xxii** *homo.chrysalis* 01:20 - 02:40

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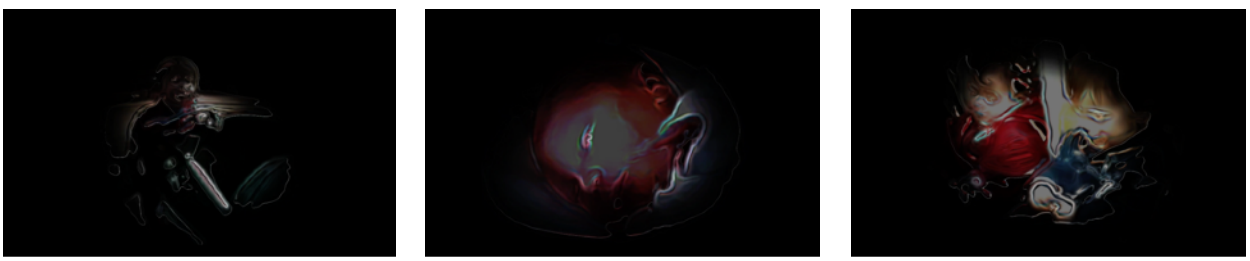
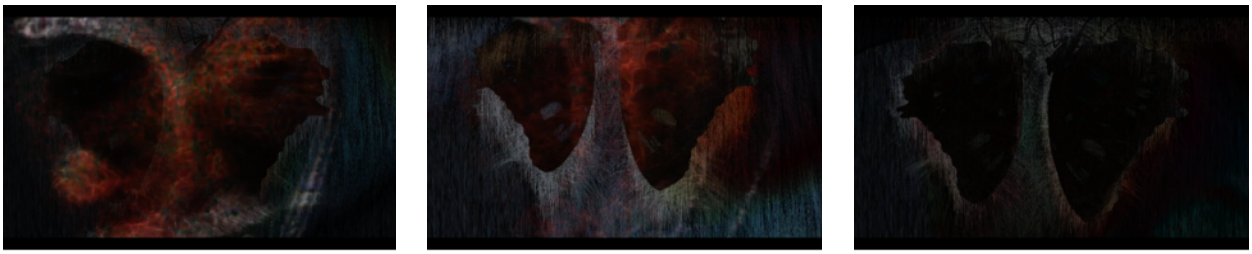


- **Figure xxiv** *homo.chrysalis* 09:28 - 10:09



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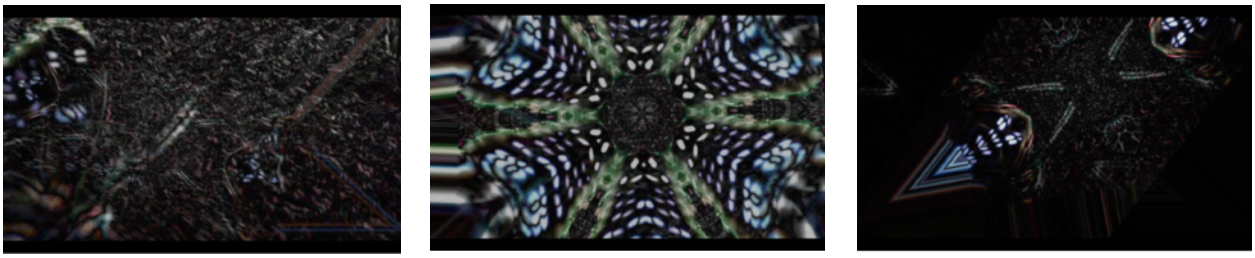

- **Figure xxvi** *homo.chrysalis* 10:33 - 11:50

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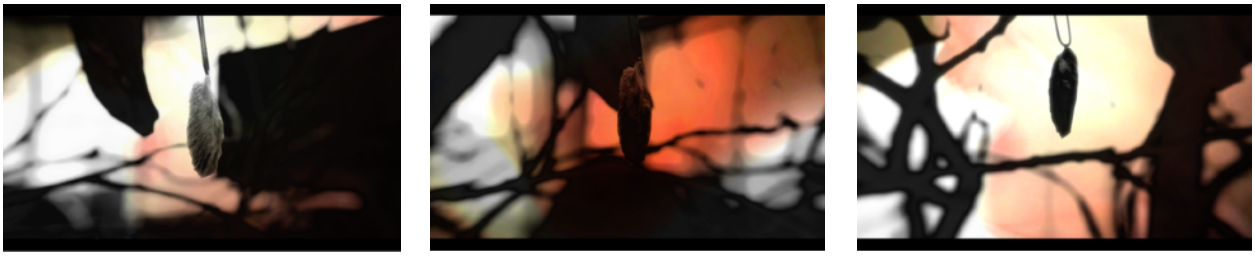

10. Appendix 1 (Wood 2017)

Wood: You talk about audio and video materials possessing 'mimetic potential'. In terms of this mimetic potential, do you believe there are certain materials that have more potential, or are universally stronger than others when examined in isolation, i.e independent of their context within a piece and any meta-narrative that has already been established? For example, material that is easily recognised (perhaps human features, omnipresent natural materials like the sun, rain etc)?

Garro: I think speech, water and the human body are elements drawn from nature with the strongest mimetic potential, for obvious reasons related to physical anthropology. This is the root of my fascination with the sound of whispers, which are a regular feature in my audio and audiovisual compositions. For humans of our technological eras also the sounds of engines or the images of a mobile phone are possibly equally significant.

Wood: What drew you to the James Sheard poem as the stimulus for Dammtor? In the genesis of the work were you looking for imagery, narrative, structure within the poem, or was it less of a defined process?

Garro: James and I are colleague in the School of Humanities at Keele and I was acquainted with his poetry before he wrote Dammtor. I used literature as inspiration for my composition in the past and I was struck by the beauty of the words in Dammtor. The complex web of imagery and metaphors, at various degree of immediacy, functioned as a sort of meta-film-script. The structuring process, though, was independently derived from the audio and video material themselves, rather than the poem. I met with James a few times during the early stage of the production process and the reason why the synergy poem-film works well is that we are both strongly influenced by the 'visual', he when he writes, me when I work with sound design and sound composition.

Wood: In what ways could the more 'concrète' methodologies like reduced listening and visual suspension intersect with the 'genetic' interdisciplinary approach mentioned in your 2014 paper 'From 'concert' to 'screening': visual anecdotes in Electroacoustic Music presentations'?

Garro: Reduced listening and visual suspensions are possible strategies for composers to work with material for material's sake, if they so wish. They are also possible strategies for audiences and analysts to 'decode' the message, if they so wish. The 'genetic' approach looks at the way a work is generated and relies on complex data about the compositional process (materials, versions, composers' notes, etc). They are all valid approaches and ideally there is much to learn from all of these approaches. I have developed a compositional praxis that continuously looks at the work which is taking shape from all these angles: I like exploring the mimetic valence of the materials, but I also want the compositions to stand the scrutiny of reduced listening and I do try to look at my own 'genetic' process as I go through it; if the genesis is laborious beyond a certain level it is a signal to me that the ideas are just not good enough and/or the materials are inadequate for the purpose of those ideas.

Wood: How would you describe the role of material that is resistant to recognisability (visual silence and noise for example) in Mimetic Visual Music?

Garro: They are the mark of style and craft. They signal intentionality to an audience who is inevitably seeking decoding clues. For example, they tell the audience "… this is not a film, in the cinematographic sense of the word… stop searching for the narrative... you need to look better, listen harder, seek deeper…"

Wood: At a basic level, major and minor tonalities are arguably deeply rooted culturally acquired responses of 'happy' and 'sad'. Do you believe a similar phenomenon exists with Visual Material? For example, culturally acquired responses drawn from cinematography and filmic language that could potentially trigger a certain emotion in an audience, but used in a 'musical' context as a part of Visual Music.

Garro: Interesting question! I have never thought about it in such clear terms like those you are using. But I know there is something there. In the acousmatic arts, for example there is something intrinsically playful in the way my colleagues and mentors Rajmil Fischman and Mike Vaughan craft many of their electroacoustic phrasings, with clusters of pointillistic materials aggregating and disintegrating in the space of a few seconds. Conversely, there is something inherently contemplative, introspective, almost melancholic in the way Denis Smalley 'paints' the macroscopic and the microscopic using sound.
I pointed out in my writings how some 'tricks' seem to work regardless the idiom, for example slow motion always conjures up ideas of epic, emotional commentary on the action/subject/object, both in cinematography and visual music. Another one is the use of visual silence; a frame that is predominantly dark, for example, puts the subject in the frame under intense emotional emphasis, both in films and in abstract animations.